

April 19, 2003

Bill Pennington  
Energy Efficiency and Demand Analysis Division  
California Energy Commission  
1416 Ninth St. MS-28  
San Francisco, CA 95814

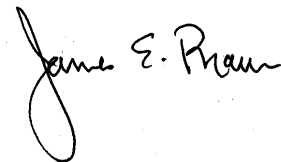
Dear Mr. Pennington,

I am writing in support of the proposed demand-controlled ventilation (DCV) requirement for Title 24 2005. We are just finishing a project sponsored by the CEC that includes an economic evaluation of demand-controlled ventilation for small commercial buildings. The energy and demand savings potential for this technology are substantial and the overall economics look very good for most applications. The economics are much more promising than competing technologies such as enthalpy exchangers or heat recovery using a heat pump.

In some cases involving modular elementary schools, we found that the use of DCV results in lower average and peak CO<sub>2</sub> levels in the classroom compared to ASHRAE 62-1999. This may be because the activity levels assumed for the standard are low for elementary age children in some situations, such as following recess periods.

I realize that reliability is a concern for DCV technology. However, the technology has matured considerably over the past few years and will continue to do so. Furthermore, the availability of CO<sub>2</sub> sensor readings could allow on-line diagnostics for economizer operation, which could lead to even greater energy and demand savings.

Sincerely



James E. Braun  
Professor

cc: Mark Hydeman

*A Graduate Student Research Laboratory of the School of Mechanical Engineering*

Ray W. Herrick Laboratories • 140 S. Intramural Drive • West Lafayette, IN 47907-2031  
(765) 494-2132 • Fax: (765) 494-0787 • rhlab@ecn.purdue.edu